graphed plate, as though they were all different names of the same family. Now to analyze the sentence :

Hitivira I suppose to be a corrupt writing of हृद्वीर *hridivîra* ' noble in heart,' equivalent to the Pehlevi word *beh* translated by " excellent."—*Airâna cha parameswara*, and the supreme lord of *Airân* or *Persia*, may be read (perhaps better) *Airân va Párseswara*, the lord of *Iran* and *Fars*. For the name, we have severally *phá, cha, va, gha*, or *há !* followed by *hitigán* or *hitikhán ;* and lastly *devajanita*, as before explained.

I am quite at a loss to find owners for such names, and although this is the third time I have alluded to this coin, gaining little by little each time, still I fear we have much to learn before we can unravel its entire history. For the present I leave unnoticed the *Pehlevi* legend, merely placing under view in the annexed plate, corresponding passages from regular Sassanian coins, which being titles, will soon lead to a knowledge of their alphabet and meaning.

III.—*Note on the affinities of Galathea of Lamarck (Potamophila of Sowerby), a Genus of Fluviatile Testacea. By* W. H. BENSON, *Esq. Bengal Civil Service.*

Much misapprehension appears to exist with regard to the proper location of the Fluviatile bivalve genus *Galathea* of LAMARCK. That distinguished author placed the shell among his " Conques Fluviatiles," and considered it to be nearly allied to *Cyrena*, referring merely to the teeth as a sufficiently distinguishing character. RANG, more unaccountably, either on a cursory examination of the shell only, or of its description and without reference to the indications of the characters of its inhabitant, which the testaceous covering exhibits, says that it would perhaps be advisable to unite it to *Cyrena*. It is true that this writer includes not only the *Conchæ* and *Nymphaceæ*, but also the *Mactraceæ*, *Cardiaceæ*, and *Lithophagi* in one overgrown section, which he denominates " Conchaçées," but this attempt at generalization does not, in any wise, absolve him from the charge of mistaking the place of the genus in question in the family, which he has thought fit to constitute. The fortuitous acquisition of a specimen of this still rather rare shell enables me to offer some observations concerning it, which may serve to illustrate its true affinities, and may not only tend to confirm LAMARCK's separation of it from *Cyrena*, but likewise shew the propriety of its location in a different family from that which he classed it.

The remaining genera of LAMARCK's *Conchæ*, whether marine or fluviatile, consisting of *Cyrena* (including the more modern genus *Corbicula*) *Cyclas*, *Cyprina*, *Cytherea*, *&c.*, possess the ligament and siphons on the longer side, or that which occupies the dorsal aspect of

the beaks : on the other hand in the *Nymphaceæ**, and especially the true *Donacidæ*, such as *Donax*, *Capsa*, &c. the ligament occupies the place of the lunule, and the siphons are exserted from the contraverse side or that towards which the beaks incline. In the fluviatile *Conchæ* the siphons are very short, and, as a necessary consequence, the siphonal scar is either very short or not apparent ; while in the *Nymphaceæ* it is very conspicuous, reaching in *Capsa* and *Donax* to the centre of the shell, and giving certain evidence of an elongated siphon. In these important particulars *Galathea* agrees with the *Donacidæ* and differs from the *Conchæ*. Its ligament occupies the lunule instead of surmounting the corselet : the siphons occupy the contraverse side of the beaks ; and lastly the elongated siphonal scar, indicative of a strong distinctive character in the animal, decides its location apart from the group which includes *Cyrena*. Its analogies also have reference to the *Donacidæ* in the peculiar truncation of the lunular side for which that family is remarkable.

An examination of the teeth of *Galathea*, will further shew its relation to the *Donacidæ* and its separation from *Cyrena*†. In *Cyrena* the three primary teeth are alike divergent, seeming like remote elided portions of rays proceeding from a common centre. In *Galathea* and *Capsa* the primary teeth in the left valve consist of two radiating prominences nearly joined at their points of departure, and exhibiting, in the included hollow space, an obtuse triangular tooth ; in the right valve there are two similar but more closely approximated primary teeth, with an interjacent hollow fitted to receive the triquetrous tooth of the opposite valve.

In *Capsa* and *Galathea* the ligament is singularly short, occupying a broad space close to the beaks, and immediately over the cardinal teeth. In *Cyrena* this important apparatus is removed towards the posterior lateral tooth.

Lamarck following Bruguieres, decided on the separation of *Galathea* from *Cyrena*, from the consideration of the form and position of the teeth alone. The particulars now stated, will shew how well those characters might have been relied on even for a more distant separation.

* Note.—*Astarte* of Sowerby (*Crassina* of Lamarck) is out of its place among the *Nymphaceæ*. Its hinge and siphons both refer to the *Conchæ*.

† Note.—In this comparison I have the typical species of *Cyrena* in view, such as *Cyrena Sumatrana*, so commonly imported into Calcutta from the Sundurbuns, for the purpose of reduction into lime, and not the aberrant species with elongate serrated lateral teeth, which are so numerous in the upper portions of the Gangetic branches, and which constitute the genus *Corbicula* of Megerle

Later naturalists in their attempts at generalization, have underrated the characters of the teeth, and overlooking the auxiliary characters impressed by the inhabiting molluscum on the shell, furnish a proof, if any were wanting, of the value of distinctions taken from the hinge, which will always be found to vary in nearly as great a degree as the inhabitant of the shell, to which we must ultimately look for those distinctions which will stamp the generic character with a real value. Where good opportunities may not occur of studying the animal of a bivalve shell, a careful consideration of the teeth aided by the situation and length of the ligament and siphonal scar, will seldom, if ever, fail to indicate its true place in nature.

LAMARCK imagined that the genus *Galathea* inhabited the rivers of Ceylon and India, and RANG appears to be equally ill informed on the subject of its true habitat. The specimen which Mr. G. B. SOWERBY obtained for me in London, was stated to have been procured from the river *Zaire* or *Congo*. The complete occupation of Ceylon by the British Government, without the discovery and transmission of any of these shells from the island, ought to afford a sufficient evidence of its non-occurrence in that quarter; but the recent discovery of the jackal in the Morea by French naturalists, after the opportunities so long enjoyed by our countrymen of exploring that region had failed to elicit that interesting information, forbids our placing complete reliance on such negative evidence in disproof of the existence of *Galathea* in Ceylon.

In conclusion it is proper to remark, that I have not met with SOWERBY's observations on *Potamophila;* should he have indicated the correct place of the genus, I can only plead, as an excuse for my work of supererogation, that I have been misled by the statement of a later writer, who, from the nature of his work and his opportunities, ought to have been acquainted with the latest information on the subject of the Testacea, into the belief that the knowledge of the affinities of this shell had not only not advanced, but that it had retrograded since the date of LAMARCK's publication.

Bareilly, Rohilkhund, March 1838.

IV.—*Account of the Hurricane or Whirlwind of the 8th April,* 1838. *By Mr.* J. FLOYD, *(communicated by* J. H. PATTON, *Esq. Magistrate of the* 24-*Pergunnahs.) (See Sketch in Pl. XVIII).*

Agreeably to your request I beg to hand you the following account of our visit to the villages that have suffered by the storm of the 8th instant.